

Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

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VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY – AMENDMENT TO ORDER BY CONSENT ISSUED TO

Robert D. and Angela S. Walk FOR

The Walk Residence Sewage Treatment Plant VPDES Permit No. VA0089630

SECTION A: Purpose

This is an Amendment of an Order by Consent (Amendment) issued under the authority of Va. Code §§ 62.1-44.15, between the Virginia Department of Environmental Quality (Department) and Robert D. and Angela S. Walk (Mr. and Mrs. Walk), regarding the Walk Residence Sewage Treatment Plant (Plant), for the purpose of revising certain provisions of the Order by Consent (Order) issued to Mr. and Mrs. Walk on January 26, 2018, and for resolving certain violations of the State Water Control Law, Permit No. VA0089630 (Permit), and the applicable regulations.

SECTION B: Basis for Amendment

- 1. Mr. and Mrs. Walk entered into the Order, effective January 26, 2018, for discharging treated sewage from the Plant while concurrently failing to comply with the conditions of the Permit.
- 2. Mr. and Mrs. Walk had corrective actions/maintenance completed at the Plant in attempt to comply with the effluent discharge limits in the Permit. Actions included pumping out and cleaning tanks and treatment units, changing filters in the phosphorus flocculation unit, adjusting the internal recirculation rate for the

recirculating sand filters, and altering the flocculent type and dosage rate utilized for phosphorus flocculation.

3. In submitting Discharge Monitoring Reports (DMRs) for the Plant's Outfall 001 as required by the Permit, Mr. and Mrs. Walk reported the following monitoring data limit exceedances for effluent discharges in comparison to the limits listed in Part I.A.1 of the Permit:

A. April 1 through June 30, 2017:

- a. Reported a Total Phosphorus monthly average concentration of 0.42 milligrams per liter (mg/L), compared to a permitted limit of 0.18 mg/L.
- b. Reported a Total Phosphorus weekly average concentration of 0.42 mg/L, compared to a permitted limit of 0.27 mg/L.

B. October 1 through December 31, 2017 DMR:

- 1. Reported a Total Phosphorus monthly average concentration of 1.56 mg/L, compared to a permitted limit of 0.18 mg/L.
- 2. Reported a Total Phosphorus weekly average concentration of 1.56 mg/L, compared to a permitted limit of 0.27 mg/L.
- 3. Reported a Total Phosphorus monthly average loading of 0.001 kilograms per day (kg/day), compared to a permitted limit of 0.0005 kg/day.
- 4. Reported a Total Phosphorus weekly average loading of 0.001 kg/day, compared to a permitted limit of 0.0008 kg/day.
- 5. Reported an Ammonia as N monthly average concentration of 10.92 mg/L, compared to a permitted limit of 3.1 mg/L.
- 6. Reported an Ammonia as N weekly average concentration of 10.92 mg/L, compared to a permitted limit of 3.1 mg/L.

C. July 1 through September 30, 2018 DMR:

1. Reported a Total Phosphorus monthly average concentration of 0.19 mg/L, compared to a permitted limit of 0.18 mg/L.

D. January 1 through March 31, 2019 DMR:

- 1. Reported a Total Phosphorus monthly average concentration of 1.56 mg/L, compared to a permitted limit of 0.18 mg/L.
- 2. Reported a Total Phosphorus weekly average concentration of 1.56 mg/L, compared to a permitted limit of 0.27 mg/L.
- 3. Reported a Total Phosphorus monthly average loading of 0.0011 kg/day, compared to a permitted limit of 0.0005 kg/day.
- 4. Reported a Total Phosphorus weekly average loading of 0.0011 kg/day, compared to a permitted limit of 0.0008 kg/day.

E. April 1 through June 30, 2019 DMR:

1. Reported a Total Phosphorus monthly average concentration of 0.42 mg/L, compared to a permitted limit of 0.18 mg/L.

2. Reported a Total Phosphorus weekly average concentration of 0.42 mg/L, compared to a permitted limit of 0.27 mg/L.

F. July 1 through September 30, 2019 DMR:

- 1. Reported a Total Phosphorus monthly average concentration of 2.81 mg/L, compared to a permitted limit of 0.18 mg/L.
- 2. Reported a Total Phosphorus weekly average concentration of 2.81 mg/L, compared to a permitted limit of 0.27 mg/L.
- 3. Reported a Total Phosphorus monthly average loading of 0.002 kg/day, compared to a permitted limit of 0.0005 kg/day.
- 4. Reported a Total Phosphorus weekly average loading of 0.002 kg/day, compared to a permitted limit of 0.0008 kg/day.

G. October 1 through December 31, 2019 DMR:

- 1. Reported a Total Phosphorus monthly average concentration of 1.31 mg/L, compared to a permitted limit of 0.18 mg/L.
- 2. Reported a Total Phosphorus weekly average concentration of 1.57 mg/L, compared to a permitted limit of 0.27 mg/L.
- 3. Reported a Total Phosphorus monthly average loading of 0.001 kg/day, compared to a permitted limit of 0.0005 kg/day.
- 4. Reported a Total Phosphorus weekly average loading of 0.0012 kg/day, compared to a permitted limit of 0.0008 kg/day.

H. January 1 through March 31, 2020 DMR:

1. Reported a TSS monthly average concentration of 7.7 mg/L, compared to a permitted limit of 6.0 mg/L.

I. July 1 through September 30, 2020 DMR:

- 1. Reported a Total Phosphorus monthly average concentration of 1.60 mg/L, compared to a permitted limit of 0.18 mg/L.
- 2. Reported a Total Phosphorus weekly average concentration of 1.60 mg/L, compared to a permitted limit of 0.27 mg/L.
- 3. Reported a Total Phosphorus monthly average loading of 0.0012 kg/day, compared to a permitted limit of 0.0005 kg/day.
- 4. Reported a Total Phosphorus weekly average loading of 0.0012 kg/day compared to a permitted limit of 0.0008 kg/day.
- 5. Reported a TSS monthly average concentration of 6.5 mg/L, compared to a permitted limit of 6.0 mg/L.

J. October 1 through December 31, 2020 DMR:

- 1. Reported a Total Phosphorus monthly average concentration of 0.71 mg/L, compared to a permitted limit of 0.18 mg/L.
- 2. Reported a Total Phosphorus weekly average concentration of 0.71 mg/L, compared to a permitted limit of 0.27 mg/L.

K. January 1 through March 31, 2021 DMR:

- 1. Reported a Total Phosphorus monthly average concentration of 0.31 mg/L, compared to a permitted limit of 0.18 mg/L.
- 2. Reported a Total Phosphorus weekly average concentration of 0.31 mg/L, compared to a permitted limit of 0.27 mg/L.

L. April 1 through June 30, 2021 DMR:

- 1. Reported a Total Phosphorus monthly average concentration of 3.74 mg/L, compared to a permitted limit of 0.18 mg/L.
- 2. Reported a Total Phosphorus weekly average concentration of 3.74 mg/L, compared to a permitted limit of 0.27 mg/L.
- 3. Reported a Total Phosphorus monthly average loading of 0.0028 kg/day, compared to a permitted limit of 0.0005 kg/day.
- 4. Reported a Total Phosphorus weekly average loading of 0.0028 kg/day, compared to a permitted limit of 0.0008 kg/day.

M. July 1 through September 30, 2021 DMR:

- 1. Reported a Total Phosphorus monthly average concentration of 1.06 mg/L, compared to a permitted limit of 0.18 mg/L.
- 2. Reported a Total Phosphorus weekly average concentration of 1.06 mg/L, compared to a permitted limit of 0.27 mg/L.
- 3. Reported a Total Phosphorus monthly average loading of 0.0008 kg/day, compared to a permitted limit of 0.0005 kg/day.
- 4. Reported a TSS monthly average concentration of 6.8 mg/L, compared to a permitted limit of 6.0 mg/L.

N. October 1 through December 31, 2021 DMR:

- 1. Reported a Total Phosphorus monthly average concentration of 1.40 mg/L, compared to a permitted limit of 0.18 mg/L.
- 2. Reported a Total Phosphorus weekly average concentration of 1.40 mg/L, compared to a permitted limit of 0.27 mg/L.
- 3. Reported a Total Phosphorus monthly average loading of 0.0011 kg/day, compared to a permitted limit of 0.0005 kg/day.
- 4. Reported a Total Phosphorus weekly average loading of 0.0011 kg/day, compared to a permitted limit of 0.0008 kg/day.

O. January 1 through March 31, 2022 DMR:

- 1. Reported a Total Phosphorus monthly average concentration of 0.98 mg/L, compared to a permitted limit of 0.18 mg/L.
- 2. Reported a Total Phosphorus weekly average concentration of 0.98 mg/L, compared to a permitted limit of 0.27 mg/L.
- 3. Reported a Total Phosphorus monthly average loading of 0.0007 kg/day, compared to a permitted limit of 0.0005 kg/day.

P. April 1 through June 30, 2022 DMR:

- 1. Reported a Total Phosphorus monthly average concentration of 1.43 mg/L, compared to a permitted limit of 0.18 mg/L.
- 2. Reported a Total Phosphorus weekly average concentration of 1.43 mg/L, compared to a permitted limit of 0.27 mg/L.
- 3. Reported a Total Phosphorus monthly average loading of 0.00108 kg/day, compared to a permitted limit of 0.0005 kg/day.
- 4. Reported a Total Phosphorus weekly average loading of 0.00108 kg/day, compared to a permitted limit of 0.0008 kg/day.
- 5. Reported an Ammonia as N weekly average concentration of 1.32 mg/L, compared to a permitted limit of 1.0 mg/L.
- 4. On February 22, 2022, DEQ issued a Notice of Violation (NOV No. W2022-02-N-0011) to Mr. and Mrs. Walk for the violations noted above in paragraph C(3) sections (I) through (O).
- 5. Va. Code § 62.1-44.5 states that: "[E]xcept in compliance with a certificate issued by the Department, it shall be unlawful for any person to discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances."
- 6. The Regulation, at 9 VAC 25-31-50, also states that except in compliance with a VPDES permit, or another permit issued by the Department, it is unlawful to discharge into state waters sewage, industrial wastes or other wastes.
- 7. Va. Code § 62.1-44.15(5a) states that a VPDES permit is a "certificate" under the statute.
- 8. The Department has issued no permits or certificates to Mr. and Mrs. Walk for the Plant other than VPDES Permit No. VA0089630.
- 9. The unnamed tributary to Accokeek Creek that receives effluent discharges from the Plant is a surface water located wholly within the Commonwealth and is a "state water" under State Water Control Law.
- 10. On April 7, 2022, DEQ had a conference call with Mr. Walk and the environmental professional contracted to operate the Plant, and on April 28, 2022, a written NOV response was submitted to DEQ.
- 11. Mr. and Mrs. Walk have requested revisions to the corrective action schedule that was accepted by DEQ at part of the Order.
- 12. On June 16, 2022, an update email was submitted by a representative of Mr. and Mrs. Walk, notifying DEQ that the installation of a static mixer at the Facility was completed as part of corrective actions.

- 13. Based on DMR submissions received for the Plant, the NOV reply dated April 28, 2022, the conference call between DEQ staff and representatives of Mr. and Mrs. Walk on April 7, 2022, the Department concludes that Mr. and Mrs. Walk have violated 9VAC25-31-50 and Part I.A.1 of the Permit, by discharging effluent from the Facility while concurrently failing to comply with the conditions of the Permit.
- 14. In order for of Mr. and Mrs. Walk to return to compliance, DEQ staff and of Mr. and Mrs. Walk have agreed to the Schedule of Compliance, which is incorporated as Appendix A of this Amendment.

SECTION C: Agreement and Order

Accordingly, by virtue of the authority granted it in Va. Code §§ 62.1-44.15, the Department orders Mr. and Mrs. Walk, and Mr. and Mrs. Walk agree to perform the actions described in Appendix A of this Amendment, which supersedes and cancels only Appendix A of the Order. Both the Department and Mr. and Mrs. Walk understand and agree that this Amendment does not alter, modify or amend any other provision of the Order and that the unmodified provisions of the Order remain in effect by their own terms.

And it is so ORDERED this 9th	day of December, 2022.
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7	Thomas A. Faha, Regional Director
J	Department of Environmental Quality
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Amendment to Consent Order Robert D. and Angela S. Walk; VPDES Permit No. VA0089630 Page 7 of 9

Robert D. and Angela S. Walk voluntarily agree to the issuance of this Order.

Date: 18 Oct 22 By:

Robert D. Walk

Date: 18 0 of 22 By:

Angela S. Walk

APPENDIX A SCHEDULE OF COMPLIANCE

Robert D. and Angela S. Walk shall:

- 1. Beginning with the calendar month of August 2022, increase the monitoring of Total Phosphorus in the Plant's effluent discharges to a monthly frequency (from the quarterly frequency required by the Permit) for a period of six months to evaluate Plant performance with a static mixer installed.
 - The monthly monitoring results shall be submitted to DEQ via the quarterly eDMR submission required by the Permit, via text in the comment section of the DMR form, or as an attachment to the eDMR submission.
- 2. If compliance with effluent Permit limits is not achieved through the completion of Item No. 1 above, by April 1, 2023, the flocculent injection process shall be modified as proposed in email correspondence dated August 5, 2022, via the installation of an injection point and recirculation process. Monitoring of Total Phosphorus in the Plant's effluent discharge shall be conducted at a monthly frequency for April through September 2023 to evaluate Plant performance following the process change, and the monthly monitoring results shall be submitted to DEQ via the quarterly eDMR submission required by the Permit, via text in the comment section of the DMR form, or as an attachment to the eDMR submission.
- 3. If compliance with effluent Permit limits is not achieved through the completion of Item No. 1, and if necessary item No. 2, as listed above, then by November 15, 2023, hire a licensed Professional Engineer to perform an evaluation of the Plant and provide specific recommendations of what is needed to comply with effluent limits in the Permit, and submit the results and recommendations of the evaluation to DEQ.
- 4. If the performance of an engineering evaluation is required per Item No. 3 above, within 30 days of submitting the results and recommendations of the evaluation to DEQ, develop and submit a plan and schedule for DEQ review, outlining any additional steps/corrective actions that will be taken to bring the Plant into compliance with the effluent discharge limits established in the Permit. Mr. and Mrs. Walk shall respond to any comments from DEQ on the proposed plan and schedule within 15 days of the date of the comments. Once the plan and schedule has been reviewed and accepted by DEQ, it shall become incorporated into the requirements of Appendix A of this Amendment.
- 5. Unless otherwise specified in this Order, Mr. and Mrs. Walk shall submit all requirements of Appendix A of this Order to:

Virginia Department of Environmental Quality

Amendment to Consent Order Robert D. and Angela S. Walk; VPDES Permit No. VA0089630 Page 9 of 9

> Northern Regional Office Attention: Enforcement 13901 Crown Court Woodbridge, VA 22193